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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/769,903	02/03/2004	Siamak Naghian	60091.00270	9185

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SQUIRE, SANDERS & DEMPSEY L.L.P.
14TH FLOOR
8000 TOWERS CRESCENT
TYSONS CORNER, VA 22182

EXAMINER	
MURPHY, RHONDA L	

ART UNIT	PAPER NUMBER
2616	

MAIL DATE	DELIVERY MODE
06/27/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/769,903	NAGHIAN ET AL.	
	Examiner	Art Unit	
	Rhonda Murphy	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-18 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-18 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on 03 February 2004 is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 6/10/05.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1 – 3 and 5 – 18 are rejected under 35 U.S.C. 102(e) as being anticipated by Tasman et al. (US 2002/0080755 A1).

Regarding claims 1, 12 and 15, Tasman teaches a wireless communication device (*Fig. 2; mobile station 2*) with a plurality of operation modes, the wireless communication device comprising: a traffic assembly unit (*Fig. 3b; radio layer 10*) for assembling incoming data unit streams into at least one output data stream, the data units destined for at least one destination node and the output data stream having a service level requirement for each of the at least one destination node (*page 4, paragraph 46*); a resource selection unit (*routing managers 12-14*) for selecting a first set of radio transmission resources for the output data stream, wherein the first set of

radio transmission resources belongs to radio transmission resources currently available in the wireless communication device (*pages 4-5, paragraphs 51-53*); path detection means (*forwarding layer 17)*, for detecting whether a path leading to a destination node and fulfilling the corresponding service level requirement is available for each of the at least one destination node, wherein one leg of the path is implemented by the first set of transmission resources (*page 5, paragraphs 53-55*); a traffic scheduling unit (*queuing layer 18*), responsive to the path detection means, for scheduling transmission of the output data stream, wherein the traffic scheduling unit is configured to schedule the transmission to occur through the first set of radio transmission resources (*page 5, paragraph 55*); and control means (*routing managers 12-14*) for controlling the operation modes so that (1) an operation mode corresponding to the first set of radio transmission resources is active when the transmission is scheduled to occur and that (2) the wireless communication device is with respect to its other operation modes in a state where the service level requirement of each destination node is maintained during the transmission (page 5, paragraphs 56 and 62).

Regarding claim 2, Tasman teaches a method according to claim 1, further comprising a step of determining a path having the highest service level of all paths leading to a destination node, wherein the determining step is performed for the destination node to which no path fulfilling the corresponding service level requirement is found (page 4, paragraph 50; page 5, paragraph 55).

Regarding claim 3, Tasman teaches a method according to claim 2, further comprising the steps of: configuring the first set of radio transmission resources (page 4, paragraph

46); testing whether the determined path having the highest service level fulfills the service level requirement for the at least one destination node in response to the configuring step (page 4, paragraph 50); and scheduling transmission of the output data stream when the determined path fulfills the service level requirement for the at least one destination node, wherein the transmission is scheduled to occur through the first set of radio transmission resources, wherein the configuring step is performed when no path fulfilling the respective service level requirement is found for the at least one destination node in the searching step (page 5, paragraph 55).

Regarding claim 5, Tasman teaches a method according to claim 4, further comprising a step of configuring the radio transmission resources available in the wireless communication device (page 4, paragraph 46).

Regarding claim 6, Tasman teaches a method according to claim 4, further comprising a step of rearranging the data units in the output data stream (page 10, end of paragraph 105; reordering).

Regarding claim 7, Tasman teaches a method according to claim 1, wherein the searching step includes finding all paths leading from the wireless communication device to the at least one destination node (page 9, paragraph 102).

Regarding claim 8, Tasman teaches a method according to claim 7, wherein the searching step comprises performing the finding step in another network element (page 9, paragraphs 102-104).

Regarding claim 9, Tasman teaches a method according to claim 1, wherein the controlling step includes changing the operation mode of the wireless communication

device prior to the transmission of the at least one output data stream (page 11, paragraph 121).

Regarding claim 10, Tasman teaches a method according to claim 1, wherein the selecting step comprises utilizing information about a current state of the radio transmission resources available in the wireless communication device (page 5, paragraph 53).

Regarding claim 11, Tasman teaches a method according to claim 1, wherein the other operation modes include a plurality of operation states (page 5, paragraph 55); and the controlling step includes synchronizing the plurality of operation states to maintain the service level requirement of each destination node during the transmission (page 5, paragraph 55).

Regarding claim 13, Tasman teaches a system according to claim 12, wherein the traffic assembly means, the resource selection means, the traffic scheduling means, and the control means reside in a single wireless communication device (elements of Fig. 3b, located within mobile 2 in Fig. 2).

Regarding claim 14, Tasman teaches a system according to claim 12, wherein: the other operation modes include a plurality of operation states (page 5, paragraph 55); and the control means are configured to synchronize the plurality of operation states to maintain the service level requirement of each destination node during the transmission (page 5, paragraph 55).

Regarding claim 16, Tasman teaches a wireless communication device according to claim 15, wherein the path detection means comprises an interface towards a routing

entity residing outside the wireless communication device (see Fig. 3b), the interface being configured to receive information about paths leading from the wireless communication device to the at least one destination node (page 5, paragraph 54).

Regarding claim 17, Tasman teaches a wireless communication device according to claim 15, wherein the path detection means comprises a routing means for searching all paths leading from the wireless communication device to the destination node (page 9, paragraph 102).

Regarding claim 18, Tasman teaches a wireless communication device according to claim 15, wherein the other operation modes include a plurality of operation states; and the control means are configured to synchronize the plurality of operation states to maintain the service level requirement of each destination node during the transmission.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was

not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tasman et al. (US 2002/0080755 A1).

Regarding claim 4, Tasman teaches a method according to claim 1, further comprising the steps of: choosing a first set of radio transmission resources for the output data stream; searching step for the first set of radio transmission resources; and scheduling transfer of the output data stream when the path is found for each of the at least one destination node in the step, wherein the transmission is scheduled to occur through the first set of radio transmission resources.

Tasman fails to explicitly disclose a choosing second set of resources and repeating the searching step for the second step.

However, it would have been obvious to one skilled in the art to include a second set of resources and repeating the searching step, in order to utilize another set of transmission resources and provide efficient means of communication.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Liu et al. (US 2007/0097926 A1).
- Holur et al. (US 2005/0272438 A1)

- Korale et al. (US 2005/0260997 A1)

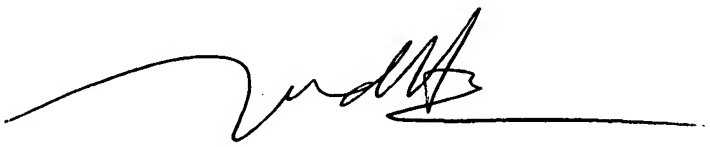
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rhonda Murphy whose telephone number is (571) 272-3185. The examiner can normally be reached on Monday - Friday 9:00 - 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu can be reached on (571) 272-3155. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Rhonda Murphy
Examiner
Art Unit 2616

RM



HUY D. VU
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600